

S.C.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/606,215	PITUCH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sing P Chan	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1 and 2.
3. ☒ The drawings filed on 25 June 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

  
CURTIS M. YES  
PRIMARY EXAMINER

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donald C. Simpson on August 4, 2004.

The application has been amended as follows:

#### **Specification**

On page 5, Paragraph 1, line 8: The tracked, incorrect/faulty label will be removed from the vacuum drum (7) by a suitable pick-off assembly (14) actuating against a second web such as a paper web, and the picked-off incorrect/faulty label will be delivered and adhered to the second web (9). The pick-off assembly may comprise an actuating arm terminating in a roller, as shown in Figures 2 and 3, or may terminate in a low-friction bearing surface; in either case, the second web is free to move easily between the unwind spool (10) and the rewind assembly (13). The second web (9) is fed via the unwind spool (10) and a dancer arm assembly (11) that ensures tension of the second web between the unwind assembly (12) and the rewind (13). When the pick-off assembly (14) is actuated, it pushes the second web against adhesive surface of the faulty label on the drum (7). When the pick-off roller assembly (14) is actuated, the unwind dancer arm (11) will release a friction belt, enabling the unwind spool (10) to

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spin. Vacuum drum (7) will transport the label, and will also drive second web (9) which will in turn drive the label pick-off roller (14). When an incorrect/faulty label is detected, it is transferred from the vacuum drum onto the second web (9). Scanner (15) is essentially a counter/rejected label verifier that detects each transferred label to ensure that the label has been removed from vacuum drum (7) and that the number of labels removed corresponds to the number of incorrect/faulty labels detected. A torque or servo motor rewind system (16) and dancer arm (17) take up the excess web material together with the adhered faulty label that is being pushed by the vacuum drum. After the label is applied to web (9), the pick-off roller assembly (14) is deactivated and returns to its unengaged position. The gap between incorrect labels on the second web can be determined by the length of time that the pick-off roller assembly (14) is activated. The user can reconcile the incorrect labels visually on the second web, on the wound web roll, or on the unwound web roll to ensure that the label counters are correct, without the necessity and time associated with separating the stack of incorrect/faulty labels adhering to each other from the take-off roll of the 5,405,482 patent. These rolls may also be used as a permanent record of reconciliations and fault corrections. Optionally, it is possible to replace scanner (15) with a reconciling scanner similar to scanner (8) or use such in addition to scanner (15). In this case, the reconciling scanner would be looking for a correct label mixed in with the incorrect/faulty labels on web (9). When a correct label is detected, the reconciling scanner can send a signal to shut down the line until the error in the labeled containers is correspondingly corrected or otherwise notify the operator of the error.

A preferred embodiment of the present invention is illustrated in Figures 4 and 5. In the embodiment of Figures 2 and 3, the unwind spool (10) and dancer arm assembly (11) co-acted to maintain tension of the second web between the unwind assembly (12) and the rewind assembly (13). As shown in Figures 4 and 5, dancer arm assembly (11) has been eliminated, and a torque clutch (18) has been added to the unwind assembly (12), thereby providing a simpler and more efficient manner of controlling tension in the second web.

### **Claim**

CLAIM 1: In a method for applying adhesive-backed labels to moving articles in which individual labels are carried by a web and transferred to a vacuum drum, and from said vacuum drum are transferred to articles to be labeled and wherein faulty labels are identified by a scanner while the labels are still on said web, and in which faulty labels are removed from said vacuum drum prior to application to one of said articles on the basis of information obtained during said scanning, the improvement which comprises removing said faulty label by pressing against the adhesive surface of said faulty label a second web that is moved at substantially the same tangential speed at its point of contact with the adhesive label as the tangential speed of the vacuum drum at the point of contact, and thereafter removing said second web away from said vacuum drum, thereby moving said faulty label with said second web, and thereafter scanning said second web to verify and reconcile faulty label removal.

CLAIM 2: In a labeling system adapted to apply pressure-sensitive, adhesive-backed labels to articles at a label-applying station comprising a means for delivering

articles to be labeled to said label-applying station and means for delivering pressure-sensitive, adhesive backed labels to said label-applying station into juxtaposition with articles to be labeled such that the adhesive side of the said adhesive-backed label intimately contacts and adheres to said contacted article, said label-delivery means comprising a vacuum drum adapted to hold adhesive-backed labels on said vacuum drum by vacuum means with the adhesive side of said label facing away from the surface of said vacuum drum, and further comprising an adhesive label delivery means adapted to deliver adhesive-backed labels to said vacuum drum with the nonadhesive surface of said label being placed on said drum, said adhesive-backed label delivery system comprising a web delivery system adapted to receive and hold labels affixed hereto by the label adhesive and to be readily stripped therefrom, and a stripping means for removing labels adhered to said web and depositing them on said vacuum drum with the nonadhesive surface of the label contacting the surface of said vacuum drum, the improvement which comprises: (a) scanning means positioned in advance of said stripping means adapted to both identify faulty labels and the position of faulty labels relative to other labels being delivered to the vacuum drum and ultimately to the adhesive-backed label application means, and further adapted to send an electronic signal as to the fact of the existence of a faulty label and the position of said faulty label; (b) a label removal means positioned between said stripping means and said label application means for removing faulty labels from said vacuum drum upon the receipt of said electronic signal from said scanner, said label removable means comprising a second continuous web adapted to be pressed against the adhesive surface of an

identified faulty label, and to be remove from contact once adherence is effected, said second web being moved at the time of contact with said faulty label at a rate coordinated with the tangential rate of movement of said label on said vacuum drum at the point of contact, and (c) scanning means subsequent to the initial point of contact between said second web and said faulty adhesive label for individually counting removed faulty labels and for verification of and reconciliation with the received information concerning faulty labels.

### **Marked Version Showing Changes made**

#### **Specification**

On page 5, Paragraph 1, line 8: The tracked, incorrect/faulty label will be removed from the vacuum drum (7) by a suitable pick-off assembly (14) actuating against the paper web a second web such as a paper web, and the picked-off incorrect/faulty label will be delivered and adhered to the paper second web (9). The pick-off assembly may comprise an actuating arm terminating in a roller, as shown in Figures 2 and 3, or may terminate in a low-friction bearing surface; in either case, the paper second web is free to move easily between the unwind spool (10) and the rewind assembly (13). The paper second web (9) is fed via the unwind spool (10) and a dancer arm assembly (11) that ensures tension of the paper second web between the unwind assembly (12) and the rewind (13). When the pick-off assembly (14) is actuated, it pushes the paper second web against adhesive surface of the faulty label on the drum (7). When the pick-off roller assembly (14) is actuated, the unwind dancer arm (11) will release a friction belt, enabling the unwind spool (10) to spin. Vacuum drum (7) will

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transport the label, and will also drive paper second web (9) which will in turn drive the label pick-off roller (14). When an incorrect/faulty label is detected, it is transferred from the vacuum drum onto the paper second web (9). Scanner (15) is essentially a counter/rejected label verifier that detects each transferred label to ensure that the label has been removed from vacuum drum (7) and that the number of labels removed corresponds to the number of incorrect/faulty labels detected. A torque or servo motor rewind system (16) and dancer arm (17) take up the excess web material together with the adhered faulty label that is being pushed by the vacuum drum. After the label is applied to web (9), the pick-off roller assembly (14) is deactivated and returns to it unengaged position. The gap between incorrect labels on the paper second web can be determined by the length of time that the pick-off roller assembly (14) is activated. The user can reconcile the incorrect labels visually on the paper second web, on the wound web roll, or on the unwound web roll to ensure that the label counters are correct, without the necessity and time associated with separating the stack of incorrect/faulty labels adhering to each other from the take-off roll of the 5,405,482 patent. These rolls may also be used as a permanent record of reconciliations and fault corrections. Optionally, it is possible to replace scanner (15) with a reconciling scanner similar to scanner (8) or use such in addition to scanner (15). In this case, the reconciling scanner would be looking for a correct label mixed in with the incorrect/faulty labels on web (9). When a correct label is detected, the reconciling scanner can send a signal to shut down the line until the error in the labeled containers is correspondingly corrected or otherwise notify the operator of the error.

A preferred embodiment of the present invention is illustrated in Figures 4 and 5. In the embodiment of Figures 2 and 3, the unwind spool (10) and dancer arm assembly (11) co-acted to maintain tension of the paper second web between the unwind assembly (12) and the rewind assembly (13). As shown in Figures 4 and 5, dancer arm assembly (11) has been eliminated, and a torque clutch (18) has been added to the unwind assembly (12), thereby providing a simpler and more efficient manner of controlling tension in the paper second web.

#### **Claim**

CLAIM 1: In a method for applying adhesive-backed labels to moving articles in which individual labels are carried by a web and transferred to a vacuum drum, and from said vacuum drum are transferred to articles to be labeled and wherein faulty labels are identified by a scanner while the labels are still on said web, and in which faulty labels are removed from said vacuum drum prior to application to one of said articles on the basis of information obtained during said scanning, the improvement which comprises removing said faulty label by pressing against the adhesive surface of said faulty label a paper second web that is moved at substantially the same tangential speed at its point of contact with the adhesive label as the tangential speed of the vacuum drum at the point of contact, and thereafter removing said paper second web away from said vacuum drum, thereby moving said faulty label with said paper second web, and thereafter scanning said paper second web to verify and reconcile faulty label removal.



CLAIM 2: In a labeling system adapted to apply pressure-sensitive, adhesive-backed labels to articles at a label-applying station comprising a means for delivering articles to be labeled to said label-applying station and means for delivering pressure-sensitive, adhesive backed labels to said label-applying station into juxtaposition with articles to be labeled such that the adhesive side of the said adhesive-backed label intimately contacts and adheres to said contacted article, said label-delivery means comprising a vacuum drum adapted to hold adhesive-backed labels on said vacuum drum by vacuum means with the adhesive side of said label facing away from the surface of said vacuum drum, and further comprising an adhesive label delivery means adapted to deliver adhesive-backed labels to said vacuum drum with the nonadhesive surface of said label being placed on said drum, said adhesive-backed label delivery system comprising a web delivery system adapted to receive and hold labels affixed hereto by the label adhesive and to be readily stripped therefrom, and a stripping means for removing labels adhered to said web and depositing them on said vacuum drum with the nonadhesive surface of the label contacting the surface of said vacuum drum, the improvement which comprises: (a) scanning means positioned in advance of said stripping means adapted to both identify faulty labels and the position of faulty labels relative to other labels being delivered to the vacuum drum and ultimately to the adhesive-backed label application means, and further adapted to send an electronic signal as to the fact of the existence of a faulty label and the position of said faulty label; (b) a label removal means positioned between said stripping means and said label application means for removing faulty labels from said vacuum drum upon the receipt of

said electronic signal from said scanner, said label removable means comprising a second continuous web of paper adapted to be pressed against the adhesive surface of an identified faulty label, and to be remove from contact once adherence is effected, said second web being moved at the time of contact with said faulty label at a rate coordinated with the tangential rate of movement of said label on said vacuum drum at the point of contact, and (c) scanning means subsequent to the initial point of contact between said ~~paper~~ second web and said faulty adhesive label for individually counting removed faulty labels and for verification of and reconciliation with the received information concerning faulty labels.

***Allowable Subject Matter***

2. Claims 1 and 2 are allowed.
3. The following is an examiner's statement of reasons for allowance: The claims recite a method and an apparatus for applying adhesive backed labels to moving articles. The method includes providing labels on a carrier web, transferring the labels to a vacuum drum, and then transferring the label from the vacuum drum to the moving articles. The method also includes providing a scanner to identify faulty labels and removing the faulty labels by pressing the adhesive surface of the faulty label to a second web moving at the same tangential speed at the point of contact with the adhesive label as the tangential speed of the vacuum drum at the point of contact and thereafter removing the second web away from the vacuum drum, moving the faulty label away from the vacuum drum, and thereafter scanning the second web to verify

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and reconcile faulty label removal. The apparatus includes labels on a carrier web, a stripping means, and a vacuum drum for transferring the label from the stripping means to the moving articles. The apparatus also includes a scanning means positioned in advance of stripping means to identify faulty labels and a label removal means for removing the faulty labels comprising a continuous second web adapted to be pressed against the adhesive surface of the faulty label and removing the second web away from the vacuum drum, moving the faulty label away from the vacuum drum, and scanning means subsequent to the initial point of contact between the second web and the faulty adhesive label for individually counting removed faulty labels and for verification and reconciliation with the received information concerning faulty labels. Morrisette et al (U.S. 5,405,482) discloses a method and an apparatus for applying adhesive backed labels to moving articles. The method and apparatus includes providing labels on a carrier web, transferring the labels to a vacuum drum, and then transferring the label from the vacuum drum to the moving articles. The method also includes providing a scanner to identify faulty labels and removing the faulty labels by pressing the adhesive surface of the faulty label to a removal roller at the vacuum drum, and moving the faulty label away from the vacuum drum. (Col 2, line 15 to Col 3, line 10) Morrisette et al does not disclose a second web to remove the faulty labels by pressing the second web to the adhesive surface of the faulty label moving at the same tangential speed at the point of contact with the adhesive label as the tangential speed of the vacuum drum at the point of contact and thereafter removing the second web away from the vacuum drum, moving the faulty label away from the vacuum drum, and

thereafter scanning the second web with a scanning means to verify and reconcile faulty label removal. Labardi (U.S. 6,450,227) discloses an apparatus for a labels check station for a labeling machine. The apparatus includes labels on carrier web, a sensor to detect any defective labels, knurled roller with a casing with two peeling edges for peeling defective labels, and a supporting structure with a cardboard core, which is pressed against the adhesive surface of the defective label and remove the defective label from the carrier web. Labardi does not disclose a second web to remove the faulty labels by pressing the second web to the adhesive surface of the faulty label moving at the same tangential speed at the point of contact with the adhesive label as the tangential speed of the vacuum drum at the point of contact and thereafter removing the second web away from the vacuum drum, moving the faulty label away from the vacuum drum, and thereafter scanning the second web with a scanning means to verify and reconcile faulty label removal.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P Chan whose telephone number is 571-272-1225. The examiner can normally be reached on Monday-Friday 7:30AM-11:00AM and 12:00PM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Chan Sing P*  
spc

  
CURTIS MAYES  
PRIMARY EXAMINER